

REMARKS/ARGUMENTS

Claims 1-6, 8, 17 and 26-37 remain in the application for further prosecution. Claims 1, 5, 17, 33 and 34 have been amended.

Claim Objections

Claim 17 was objected to because of informalities. The Applicant appreciates the careful review of the Examiner and has amended claim 17 to correct the informality.

§ 102 and §103 Rejections

Claims 1-3, 5 and 37 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,949,346 to Kuper et al. ("Kuper").

Claims 6 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuper in view of U.S. Patent Nos. 5,936,984 to Meissner et al. ("Meissner") and 6,014,393 to Fulbert et al. ("Fulbert").

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuper in view of U.S. Patent No. 5,084,889 to Tajima ("Tajima").

Allowable Subject Matter

Claims 33, 34 and 36 were objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Independent Claims 1, 5 And 17

The claims have been amended to clarify that the optical-quality interface is one that allows for transmission of the output energy from the laser device. As such, the output energy can be reflected between a bottom surface on the nonionic base layer and a top surface on the

ionic layer. In other words, the optical-quality interface does not present a boundary for the output energy as it undergoes internal reflections within the laser device. For example, claims 1, 5 and 17 require the output energy from the laser device to “pass through said optical-quality interface” as it is being reflected internally within the laser device.

Quite differently, the heat sinks 2 of Kuper are bonded to the laser slab 1 through a bonding layer 5. Column 2, line 63, to column 3, line 6. Kuper’s bonding layer 5 is made from a material that has a refractive index that causes the total internal reflection within the slab 1. This can be seen in FIG. 4, where the output energy reflects off the upper and lower surfaces of the slab 1, and does not enter the heat sinks 2, which the Examiner suggested was analogous to the nonionic base layer in the claims. In other words, none of the output energy from the laser device enters, is emitted from, or is reflected within Kuper’s heat sinks 2. In fact, this is Kuper’s invention as all of Kuper’s claims require this total internal reflection only within the laser slab 1 and the bonding agent 5 must have a smaller refractive index than the slab to create the total internal reflection. As such, Kuper fails to teach, and actually teaches against, the claimed concept of the output energy from the laser device reflecting within the nonionic base layer and the ionic layer and passing through the optical-quality interface as called for in independent claims 1, 5 and 17.

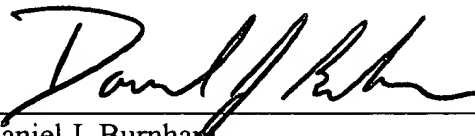
Consequently, independent claims 1, 5 and 17, and their dependent claims, are believed to be allowable over the cited references. The Applicant further notes that claims 33 and 34 were amended to provide consistency with the amendments to independent claims 1 and 17.

Conclusion

It is the Applicant's belief that all of the claims are now in condition for allowance and action towards that effect is respectfully requested.

If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at the number indicated.

Respectfully submitted,



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